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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,406	12/21/2001	Shunpei Yamazaki	SEL 297	2501

7590

06/14/2004

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EXAMINER

LAO, LUN YI

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/026,406

Applicant(s)

YAMAZAKI ET AL.

Examiner

Lao Y Lun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-62 is/are pending in the application.  
4a) Of the above claim(s) 1,5,6,19,21-24 and 27-30 is/are withdrawn from consideration.  
5) ☒ Claim(s) 3,4,7-18 and 33-62 is/are allowed.  
6) ☒ Claim(s) 2,20,25,26,31 and 32 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Bell(4,996,523).

As to claims 2, 31 and 32, Bell et al(4,996,523) teach a light emitting device comprising a pixel having a light emitting element(40); means(22n) for storing digital video signals and means for determining periods in which the light emitting element emits a light corresponding to the video signals(see figures 1-2; column 1, lines 58-68; column 2, lines 1-9 and lines 51-68; column 3, lines 6-16 and lines 41-68).

As to claim 32, Bell et al teach an electroluminescent display device(see column 1, lines 7-10).

3. Claims 20 and 25 and are rejected under 35 U.S.C. 102(b) as being anticipated by Kanaly(5,225,823).

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As to claims 20 and 25, Kanaly teaches an LCD display device comprising a pixel having a liquid crystal cell(19); n bit memory(52, 24 bit registers) for storing digital video signals and means for determining periods in which the liquid crystal is turned on corresponding to the video signals(see figures 3, 5, 7, 9-11; column 5, lines 4-48; column 6, lines 18-61 and column 7, lines 3-55).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanaly in view of Okumura et al(5,945,972).

Kanally fails to disclose an LCD apparatus is portable computer, or cellular phones.

Okumura et al teach an LCD display used in a portable computer or cellular phones(see column 2, lines 15-19). It would have been obvious to have modified Kanally with the teaching of Okumura et al, since the LCD having

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reduced in the depth weight and power dissipation comparing to a CRT display(see Okumura et al's column 1, lines 20-26).

***Allowable Subject Matter***

6. Claims 3-4, 7-18 and 33-62 are allowable since Kanaly(5,225,823) does not teach a counter circuit for outputting n counter signals with different frequencies.

***Response to Arguments***

7. Applicant's arguments filed on May 13, 2004 have been fully considered but they are not persuasive.

Applicants argue that Bell does not teach the feature of "wherein the period turn up successively in one frame period" on page 27. The examiner disagrees with that since Bell teaches the period of a light emitting element turn up successively in one frame period since the display period is a frame period and a memory stored one frame data(see figure 1; column 2, lines 32-50 and column 3, lines 17-40).

Applicants argue that Kanaly does not teach the feature of "wherein the period turn up successively in one frame period" on page 28. The examiner disagrees with that since Kanaly teaches the period of a light emitting element turn up successively in one frame period since the display period is a frame

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period and a memory is stored one frame data(see figures 7-8; column 3, lines 62-65 and column 6, lines 38-50).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

June 12, 2004

  
**Lun-yi Lao**  
**Primary Examiner**